Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-13.   (Canceled)

14.   (Previously Presented)   An apparatus for automatically generating a mipmap chain of texture images from a portion of texture image data for use in texturing a computer graphic image in a tile-based rendering system comprising:

means for supplying texture data;

means for allocating the texture data to at least one tile;

means for storing the texture data allocated to each tile in a tile buffer:

means for filtering the texture data in the tile buffer for each tile and generating at least one lower level of mipmap data from the texture data;

means for temporarily storing each lower level of the mipmap data in the tile buffer; and

means for storing each lower level of the mipmap data in a system main memory,

wherein the filtering means and the temporarily storing means generate a predetermined number of mipmap levels to form the mipmap chain of the texture images.

15.   (Previously Presented)   The apparatus according to claim 14, wherein the tile buffer is used for temporarily storing image data prior to writing it to a frame buffer.

16. (Previously Presented) The apparatus according to claim 15, wherein the frame buffer comprises a portion of the main memory.

17.-22. (Canceled)

23. (Previously Presented) A method for automatically generating a mipmap chain of texture images from a portion of texture image data for use in texturing a computer graphics image in a tile based rendering system, the method comprising the steps of:
supplying texture data;
allocating the texture data to at least one tile;
storing the texture data for each tile in a tile buffer;
for each tile, filtering the texture data in the tile buffer and generating at least one lower level of mipmap data from the texture data;
temporarily storing each level of the mipmap data in the tile buffer; and
storing each level of the mipmap data in a system main memory,
wherein the filtering step and the temporarily storing step generate a predetermined number of mipmap levels to form the mipmap chain of the texture images.

24.-25. (Canceled)

26. (Previously Presented) The apparatus according to claim 14, wherein the filtering means includes a box filter.

27. (Previously Presented) The method according to claim 23, further comprising the step of storing the texture data associated with the image to be shielded in the system main memory before generating the mipmap chain of the texture images.

28. (Previously Presented) The apparatus of claim 14, additionally comprising means for overwriting a preceding level of the mipmap data in the tile buffer with a succeeding level of the mipmap data.

29. (Currently Amended) The method of ~~claim 22~~claim 23, additionally comprising the step of overwriting a preceding level of the mipmap data in the tile buffer with a succeeding level of the mipmap data.